

THOMSON  
DELPHION

RESEARCH

PRODUCTS

INSIDE DELPHION

High Added Value Products

Search: QuickNumber Soclecan Advanced Derwent

Help

## The Delphion Integrated View

Get Now: ☒ PDF | [More choices...](#)Tools: Add to Work File: ☒ Create new Work File ☒ GoView: INPADOC | Jump to: ☒ Top ☒ Go to: Derwent☒ Email this to a friendTitle: **JP9124327A2: FINE HOLLOW GLASS BALL AND ITS PRODUCTION**Derwent Title: Producing micro glass balloons - used as lightweight filler for plastics, floating material for ships, synthetic wood or artificial marble [\[Derwent Record\]](#)

Country: JP Japan

Kind: A

Inventor: YAMADA KENJI;  
HIRANO HACHIRO;  
SATO MASAKUNI;Assignee: ASAHI GLASS CO LTD  
[News, Profiles, Stocks and More about this company](#)

Published / Filed: 1997-05-13 / 1996-08-21

Application Number: JP1996000220120

IPC Code: C03B 19/08; C03C 11/00; C08K 3/40;

ECLA Code: B63B43/10; C03C11/00B;

Priority Number: 1995-08-28 JP1995000219068

Abstract: PROBLEM TO BE SOLVED: To readily produce fine hollow glass beads having a uniform particle size by subjecting formulated glass raw materials containing a foaming agent to wet milling to form a slurry of fine particles and heating them in the form of liquid drops for vitrification.

SOLUTION: Glass raw materials such as silica sand, soda ash, borax, lime and the like and a foaming agent such as sodium sulfate are mixed to prepare a formulated glass raw materials. This formulated glass raw materials are wet-crushed to prepare of a slurry of a formulated glass raw materials of 3µm average particle size. The suitable crusher is made of alumina or zirconia at the liquid contacting with the liquid. Then, the slurry is atomized into liquid particle by spraying, ultrasonic atomization, or centrifugation, heating the liquid particles to effect vitrification and simultaneously produce fine hollow glass beads. The objective fine hollow glass beads have a particle size of 1-50µm, a real density of 0.1-1.5g/cm<sup>3</sup>, a low specific gravity and is useful as a floatation material for ships.

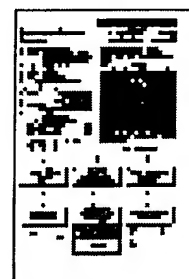
COPYRIGHT: (C)1997,JPO

Family: None

BEST AVAILABLE COPY

Forward References: Go to Result Set: Forward references (1)

PDF	Patent	Pub.Date	Inventor	Assignee	Title
			Tanaka;	Asahi Glass	Fine hollow glass sphere and



View Image

1 page

	US6531222	2003-03-11	Masaharu	Company, Limited	method for preparing the same
---	-----------	------------	----------	------------------	-------------------------------

Other Abstract  
Info:

DERABS C1997-316360 DERABS C1997-316360



[Nominate this for the Gallery...](#)



© 1997-2004 Thomson    [Research Subscriptions](#) | [Privacy Policy](#) | [Terms & Conditions](#) | [Site Map](#) | [Contact Us](#) | [Help](#)

BEST AVAILABLE COPY



(19)

(11) Publication number: **09124327 A**

Generated Document.

**PATENT ABSTRACTS OF JAPAN**(21) Application number: **08220120**(51) Intl. Cl.: **C03B 19/08 C03C 11/00 C08K 3/40**(22) Application date: **21.08.96**(30) Priority: **28.08.95 JP 07219068**(43) Date of application  
publication: **13.05.97**(84) Designated contracting  
states:(71) Applicant: **ASAHI GLASS CO LTD**(72) Inventor: **YAMADA KENJI  
HIRANO HACHIRO  
SATO MASAKUNI**

(74) Representative:

**(54) FINE HOLLOW GLASS  
BALL AND ITS  
PRODUCTION**

(57) Abstract:

**PROBLEM TO BE SOLVED:** To readily produce fine hollow glass beads having a uniform particle size by subjecting formulated glass raw materials containing a foaming agent to wet milling to form a slurry of fine particles and heating them in the form of liquid drops for vitrification.

**SOLUTION:** Glass raw materials such as silica sand, soda ash, borax, lime and the like and a foaming agent such as sodium sulfate are mixed to prepare a formulated glass raw materials. This formulated glass raw materials are wet-crushed to prepare of a slurry of a formulated glass raw materials of 3 μm average particle size. The suitable crusher is made of alumina or zirconia at the liquid contacting with the liquid. Then, the slurry is atomized into liquid particle by spraying, ultrasonic atomization, or centrifugation, heating the liquid particles to effect vitrification and simultaneously

**BEST AVAILABLE COPY**

produce fine hollow glass beads. The objective fine hollow glass beads have a particle size of 1-50 $\mu$ m, a real density of 0.1-1.5g/cm<sup>3</sup>, a low specific gravity and is useful as a floatation material for ships.

COPYRIGHT: (C)1997,JPO